DEPARTMENT of ENVIRONMENTAL SERVICES Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: HALL POND	Lake Area (ha):	5.87
Town: CHARLESTOWN	Maximum depth (m):	1.6
County: Sullivan	Mean depth (m):	0.8
River Basin: Connecticut	Volume (m³):	47500
Latitude: 43°15'08" N	Relative depth:	0.6
Longitude: 72°21'39" W	Shore configuration:	1.51
Elevation (ft): 1010	Areal water load (m/yr):	16.49
Shore length (m): 1300	Flushing rate (yr^{-1}) :	20.50
Watershed area (ha): 212.0	P retention coeff.:	0.50
<pre>% watershed ponded: 0.0</pre>	Lake type: arti	ficial

BIOLOGICAL:	6 February 2002	11 July 2001
DOM. PHYTOPLANKTON (% TOTAL) #1	NO WINTER	DINOBRYON 40%
#2	SAMPLES COLLECTED	SYNURA 15%
#3		CHRYSOSPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		6.57
DOM. ZOOPLANKTON (% TOTAL) #1		NAUPLIUS LARVA 37%
#2		POLYARTHRA 19%
#3		CYCLOPOID COPEPOD 15%
ROTIFERS/LITER		217
MICROCRUSTACEA/LITER		444
ZOOPLANKTON ABUNDANCE (#/L)		711
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		1.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	11.5	7.7
BACTERIA (E. coli, #/100 ml) #1		1
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

CHEMICAL:	MICAL: Lake: HALL POND Town: CHARLESTOWN				
	6 Febru	uary 2002	11 3	July 2001	
DEPTH (m)	1.0		1.0		
pH (units)	6.5		6.8		
A.N.C. (Alkalinity)	7.6		7.8		
NITRATE NITROGEN	0.24		< 0.05		
TOTAL KJELDAHL NITROGEN	0.20				
TOTAL PHOSPHORUS	0.014		0.020		
CONDUCTIVITY (µmhos/cm)	49.2		26.0		
APPARENT COLOR (cpu)	22		43		
MAGNESIUM			0.90		
CALCIUM			3.2		
SODIUM			1.9		
POTASSIUM			< 0.40		
CHLORIDE	3		2		,
SULFATE	7		4		
TN : TP	31				
CALCITE SATURATION INDEX			3.1		

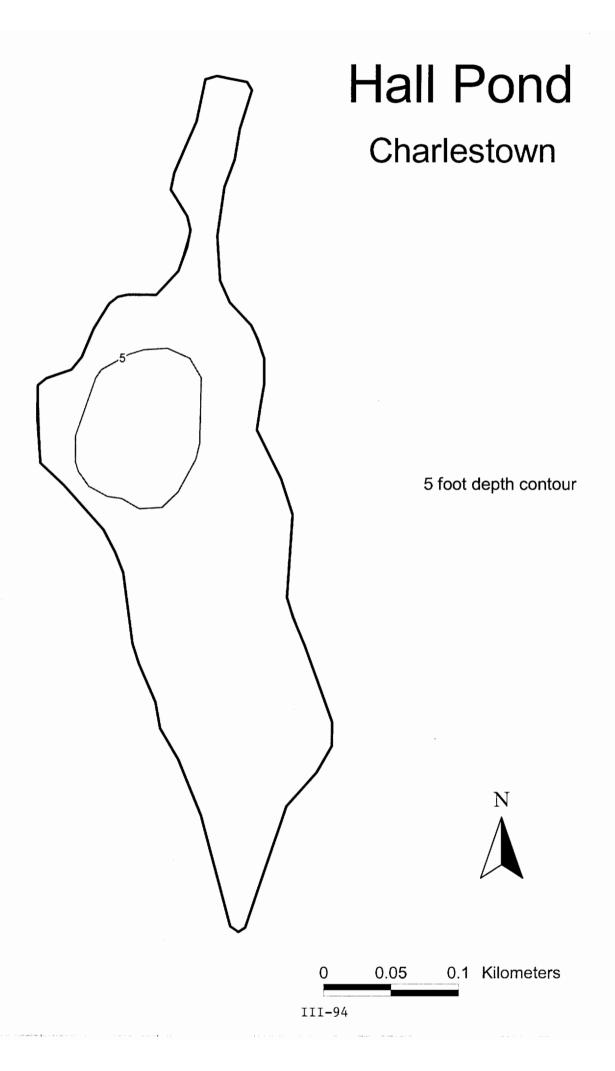
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2001

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	2	3	1	6	Meso.

COMMENTS:

- 1. This is a somewhat remote pond with no development located down a 4-wheel drive road. The entire shoreline was wooded.
- 2. A small boat or canoe can be launched adjacent to the concrete dam but it is not a maintained access site. No designated area for parking.
- 3. Summer phytoplankton were varied 20 genera observed but were dominated by Chrysophytes. Zooplankton were abundant.



FIELD DATA SHEET

TOWN: CHARLESTOWN

LAKE: HALL POND DATE: 07/11/2001

WEATHER: Sunny & calm

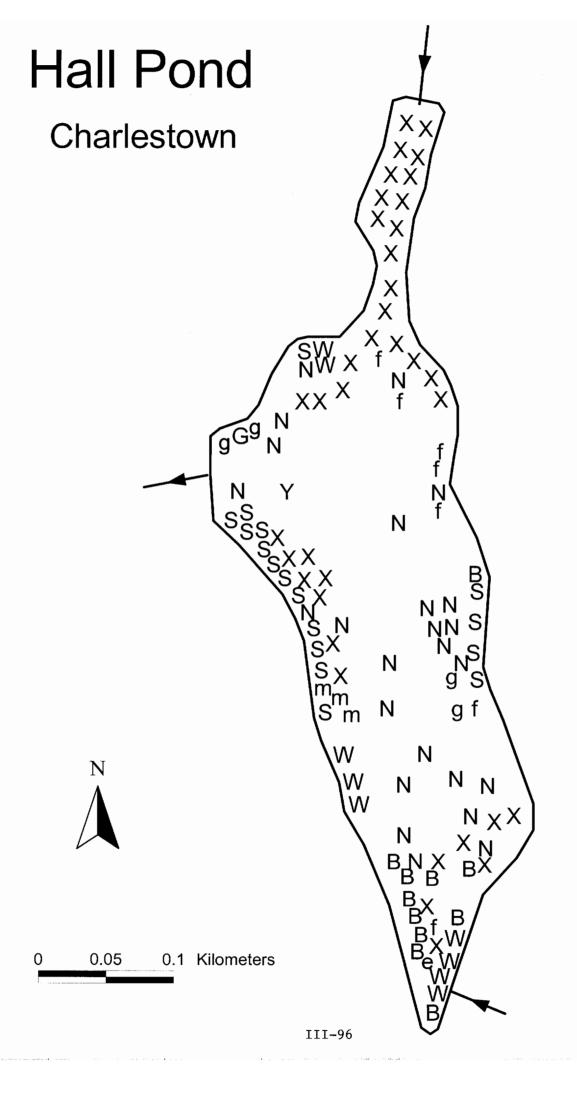
2.112. 0., 11, 2001	wanting to builty to daim				
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION		
0.1	24.0	9.4	112 %		
1.0	23.4	9.4	111 %		
1.5	23.1	7.7	90 %		

SECCHI DISK (m): 1.5 VOB COMMENTS:

BOTTOM DEPTH (m): 1.6

TIME: 1130

*Dissolved oxygen values are in mg/L



AQUATIC PLANT SURVEY

LAK	E: HALL POND	TOWN: CHARLESTOWN DA	TE: 07/11/2001	
Key	PLANT	NAME	ADUNDANCE	
кей	GENERIC	COMMON	ABUNDANCE	
g	Spongilla	Freshwater sponge	Sparse	
G	Gramineae	Grass family	Sparse	
N	Nymphaea	White water lily	Common	
S	Sparganium	Bur reed	Scattered	
W	Potamogeton	Pondweed	Scattered	
Х		Sterile thread-like leaf	Common	
В	Brasenia schreberi	Water shield	Sparse	
е	Elodea nuttallii	Waterweed	Sparse	
m	MUSCI	Aquatic moss	Sparse	
Y	Nuphar	Yellow water lily	Sparse	
f		Filamentous algae	Scattered	
-				

OVERALL ABUNDANCE: Common

GENERAL OBSERVATIONS:

- 1. Northern inlet cove, located downstream of an earthen dam, was very shallow and the bottom was covered with sterile thread-like leaves.
- 2. Newts and a cormorant were observed.